Patent Claims

1. Process to examine at least one object, whereby properties of the object are detected by various measurements within a spatial-frequency space formed by spatial frequencies, **characterized in that** various measurements are taken in overlapping areas of the spatial-frequency space and, additionally, in areas of the spatial-frequency space that differ from each other.

2. Process according to Claim 1, **characterized in that** measurements of the areas take place with at least three different detection rates of occurrence.

3. Process according to one or both of Claims 1 and 2, **characterized in that** the areas that overlap cover a central region of the spatial-frequency space.

4. Process according to one or more of the preceding claims, **characterized in that** the additional areas in the spatial-frequency space are at a distance from each other that is greater than their spatial-frequent extension in the direction of this distance.

5. Process according to one or more of the preceding claims, **characterized in that** the additional areas of spatial-frequency space extend, at least partially, parallel to each other.

6. Process according to one or more of the preceding claims, **characterized in that** elements of the detected areas form a disjunctive set in at least one measurement.

7. Process according to Claim 6, **characterized in that** disjunctive elements extend, at least partially, parallel to each other in the spatial-frequency space.

8. Process according to one or more of the preceding claims, **characterized in that** the measurements are carried out in such a way that a cycle is formed in which at least some of the areas of the spatial-frequency space that differ from each other are once again detected in additional measurements.